

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/JP2005/001542

## A. CLASSIFICATION OF SUBJECT MATTER

Int.Cl.<sup>7</sup> H01L27/04, 27/088, 27/092, 29/786, G06K19/07

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl.<sup>7</sup> H01L27/04, 27/088, 27/092, 29/786, G06K19/07

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Published examined utility model applications of Japan 1922-1996  
Published unexamined utility model applications of Japan 1971-2005  
Registered utility model specifications of Japan 1996-2005  
Published registered utility model applications of Japan 1994-2005

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP 2003-086706 A (SHARP KABUSHIKI KAISHA), 2003.03.20, FULL TEXT, ALL FIGURES & US 2004/0207011 A1, FULL TEXT, ALL FIGURES & WO 2003/009385 A1 & JP 2003-031697 A & TW 000564546 A	1-12
A	WO 1999/026290 A1 (SEIKO EPSON CORPORATION) 1999.05.27, FULL TEXT, ALL FIGURES & US 2001/0038308 A1, FULL TEXT, ALL FIGURES & KR 000070087 A	1-12
A	JP 2002-041160 A (THE UNIVERSITY OF TOKYO) 2002.02.08, FULL TEXT, ALL FIGURES (Family: none)	1-12

 Further documents are listed in the continuation of Box C. See patent family annex.

## \* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier application or patent but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- "&" document member of the same patent family

Date of the actual completion of the international search

25.05.2005

Date of mailing of the international search report

10.5.2005

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP 06-021443 A (NEC CORPORATION) 1994.01.28, FULL TEXT, ALL FIGURES & US 5461338 A, FULL TEXT, ALL FIGURES	1-12
A	JP 2000-252470 A (SONY CORPORATION) 2000.09.14, FULL TEXT, ALL FIGURES & US 6342717 B1, FULL TEXT, ALL FIGURES & KR 000058064 A	1-12